

(M. H. Swenk); Lincoln, July 17, 1929 (R. H. Nelson) (♀, ♂).

THEOBALDIA INCIDENS Thomson.* War Bonnet Canyon (Sioux Co.), (♀). Previous records for this species extended as far east as Montana in the North and New Mexico in the South. This apparently is the first time it has been found east of the Rocky Mountains.

T. INORNATA Williston.* Dunbar, Sept. 24, 1941 (W. W. Wirth) (11 ♀ ♀); Lincoln, March 18, 1913 (L. Bruner) (♀), May 26, 1930 (R. Roberts) (2 ♀ ♀); Waverly, Feb. 10 (L. Bruner) (♀).

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Two New Species of *Calophya* and Notes on Others (Psyllidae: Homoptera).

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The genus *Calophya* is holarctic in distribution and so far as is known the members all have species of *Rhus* as their host plants, except *C. oweni* which inhabits *Phoradendron juniperinum*. Intensive collecting in areas of the western United States, the homopterous fauna of which has not been well known previously, has resulted in the capture of the two species here described as new.

CALOPHYA CALIFORNICA Schwarz.

1904 *Calophya californica* Schwarz, Proc. Ent. Soc. Wash. VI: 241, 242.

1914 *Calophya californica* Crawford, U. S. N. M. Bull. 85: 50.

The color variations which Schwarz and Crawford record are apparently a sexual difference. The study of specimens shows that the males are dark brown to black on the vertex and thoracic dorsum, the females, however, are much lighter in color, light brown to golden yellow. I have at hand specimens from Los Angeles County, San Jacinto Mountains, Alpine and "west of Jacumba," California and one male from Yarnell Heights, Arizona.

***Calophya minuta* n. sp.**

Length to tip of folded wings 1.5-1.75 mm.

Color: Head, except genal processes and antennae, prothorax except legs, mesothorax except legs, shining black. Metathorax, abdomen and legs light green to yellowish. Antennae white, black-tipped. Genal processes greenish white. Wings hyaline, forewings slightly yellowish.

Structure: Vertex very smooth, evenly rounded downward anteriorly, not bulging. Genal processes of medium length, longer than basal width, subacute, not divergent, extending forward parallel to plane of dorsum of vertex. Antennae thick, short, slightly shorter than width of head. Thorax weakly arched. Legs small. Hind tibia with very small apical spines, one outer, two inner. Forewings rounded apically, slightly over twice as long as wide; Rs long, nearly straight; cubital cell much larger than medial; pterostigma broad, moderately long; small radular areas in both marginal cells and between. Membrane of hind wings set with minute points.

Genitalia: Male proctiger evenly swollen on caudal margin. Forceps shorter than proctiger; in lateral view moderately thick, strongly curved cephalad to subacute apex; in caudal view broad, mesally notched before apex, apical portion a sharp retrorse hook, notch black margined and irregularly serrate. Female genital segment three-fourths as long as rest of abdomen, valves subequal in length; dorsal valve straight, black tipped, flattened and blunt in dorsal view; ventral valve broadly rounded apically.

Described from 19 males and 10 females, Tumicacari Mountain, ARIZONA, July 22, 1938, R. H. Beamer, 3 females, Santa Rita Mountains, Arizona, July 19, 1938, R. H. Beamer and a series of 11 males and 6 females, Atascosa Mountain, Arizona,

October 24, 1937, P. W. Oman.

Holotype male, Tumicacari Mountain, Arizona, July 22, 1938, R. H. Beamer, *allotype* female, same data, and paratypes in Snow Collection, University of Kansas. Paratypes in U. S. National Museum and author's collection.

This species resembles *C. californica* in general appearance but may readily be distinguished from the latter by its much smaller size, the much shorter and more rounded vertex and the short, forward projecting genal processes. The genitalia are also distinctive as described.

CALOPHYA DUBIA Crawford. Fig. 1. A.

1914 *Calophya dubia* Crawford, U. S. N. M. Bull. 85: 49, 51.

This species, which was described from a single pair of specimens, has been taken in large numbers at several localities in southern Colorado. It is the most numerous species on *Rhus trilobata* at high altitudes in midsummer. The males fit Crawford's description very well. The females range in color from clear yellow to light brown.

In addition to numerous Colorado specimens several males and females are at hand from Trident, Montana, collected June 4, 1940, by D. J. Pletsch.

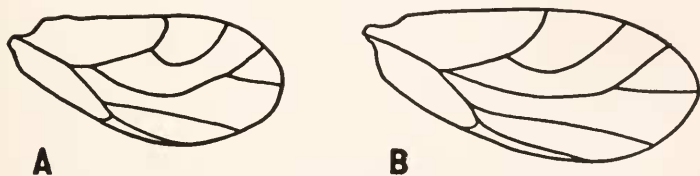


Fig. 1. A. Forewing of *Calophya dubia*. B. Forewing of *Calophya aurea*.

***Calophya aurea* n. sp.** Fig. 1. B.

Length to tip of folded wings 2-2.25 mm.

Color: Uniformly golden yellow. Tips of antennae dark. Wings yellowish, darker along veins.

Structure: Head small. Vertex rather flat dorsally, slightly bulging each side of median line anteriorly. Frons prominent from base of genal processes to ocellus. Genal processes short, stout, sharp, strongly divergent, extending forward, about as long as basal width. Antennae short, thick, a little shorter than width of head. Thorax strongly arched. Pronotum long,

vertical. Hind tibia with one outer and two inner apical spines. Membrane of forewings somewhat thickened, three small radular areas on margin; marginal cells elongate for genus, medial cell proportionately larger; pterostigma large. Membrane of hind wings thickly set with minute points.

Genitalia: Male proctiger straight, nearly parallel-margined slightly swollen on caudal margin. Forceps much shorter than proctiger, in lateral view broad, straight, parallel margined, apices obliquely, roundly truncate; in caudal view broad, slightly arched; apices black-margined and serrate mesally, a more prominent tooth at cephalic end. Female genital segment as long as rest of abdomen, dorsal valve slender apically, blunt, dorsal margin concave; ventral valve nearly equal in length, flattened and broad apically.

Described from 7 males and 21 females from Durango, Pagosa Springs, Ridgeway, Creede and El Paso Co., COLORADO and one pair from Trident, MONTANA.

Holotype male, Durango, Colorado, July 4, 1937, L. D. Tuthill; *allotype* female, Pagosa Springs, Colorado, July 16, 1938, L. D. Tuthill. Holotype, allotype and paratypes in author's collection, paratypes in Snow Collection, University of Kansas, U. S. National Museum, collection of Montana State College and collection of Academy of Natural Sciences, Philadelphia.

Most of the specimens were taken on *Rhus trilobata* in early July.

Although occurring on the same host plant and in company with *C. dubia* this form is readily distinguished from the latter. The difference in color, in the shape and venation of the forewing (as shown in the accompanying figures), in shape of head and genal processes and the distinctive genitalia all combine to make it easily recognizable.

OBITUARY.

CHARLES DAVIES SHERBORN, known to entomologists and zoologists generally for his compilation of *Index Animalium*, a complete list of all generic and trivial names from 1758 to 1850, died June 22, 1942, within a week of his 81st birthday. An obituary notice is in *Nature* (London) for August 1, 1942.